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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,875	07/03/2003	Chin An Yang	2019-0202P	4144
2292	7590	02/24/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CLARK, SHEILA V	
			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/611,875

Applicant(s)

HSIEH ET AL

Examiner

S. V. Clark

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the passive component connected to a signal lead finger group must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1-4, 8-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

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had possession of the claimed invention. The amended claims appear to fuse two embodiments into one single structure, which appears to present new matter. One embodiment figure 3 shows the passive components bridging two separated die pad sections 76 and 77 and shows no connection to signal leads. Chip 74 appears to be the only component connected to the pad and lead structure via wires 78. Figure 4 presents a different embodiment having passive components bridging lead fingers but no separated pads is shown. Also page 4 lines 12-13 and page 7, line 20-21, relay the passive components are located on the separated die pad **or** bridging between distinct lead fingers. There does not appear to be presented in the disclosure or in pictorial fashion a fusion of the embodiments whereby said passive component is connected to both pad and leads. The amended claims however appear to fuse the two whereby claim 1 for example recites passive components connected to the separated pads and connected to the signal lead group.

Further the portion of the disclosure that discusses the signal lead group fails to relate this group to the features of the die pad.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 8-13, 15 insofar as understood are rejected under 35 U.S.C. 102(a) as being anticipated by Terui et al.

Terui et al shows in for example figure 10 a die 403, at least two separated die pads 401P, 401G each connected to a voltage level (Power, Ground) and a plurality of lead fingers 405, 407 and at least one passive component 410 having two ends connected to said pads.

Figure 2 shows printed circuit board connection recited in claim 3 and Figure 3 show a busbar 11 disposed between non adjacent leads and extending from at least one of the non-adjacent leadfingers P and G.

The steps of preparing, adhering, wire bonding, preparing a mold (page 5, paragraph 0086), and electrically connecting, having a bus bar, metallizing with a conductive paste is before mounting is taught in (0080) are deemed to be inherently taught by Terui et al.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 insofar as understood under 35 U.S.C. 103(a) as being unpatentable over Terui et al in view of Venkateshwaran et al.

Lead frames are typically formed of alloys as Venkateshwaran et al.

teaches in col 1,  
typically made from

leadframe between the chips of the set. The leadframe portions are made solely of metal. Typical choices are copper, copper alloys, iron-nickel alloys ("Alloy 42"), and invar. For reasons of easy and cost-effective manufacturing,

that lead frames are  
alloys. As Terui et al

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failure to disclose the lead frame of his invention to be made of any one material in particular suggests use of conventional alloys such as those taught by Venkateshwaran et al which would have been well known to one having ordinary skill in this art.

Claims 1-4, 8-15 are rejected.

Applicant's arguments filed 11-12-2004 have been fully considered but they are not persuasive. The amended claims as described above appear to incorporate two different embodiments and thereby raising new matter issues. It is unclear where the disclosure provides basis for the two features existing together. Also there is no figure that supports the passive component connection to a signal lead and if said feature is to exist in the claims it would have to be represented on a figure drawing. It may be beneficial for the applicant to discuss matters related to these claims with the Examiner to clarify issues and to determine what features if incorporated into the claims would allow the claims to be further considered for allowance.

As the applicant indicated in his remarks the features discussed in the Turei/Venkateshwaran et al rejection discuss the features of claims 14 and include a typo that indicated claims 15 instead of 14 which has been corrected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to S. V. Clark at telephone number (571) 272-1725.



S. V. Clark  
Primary Examiner  
Art Unit 2815

February 19, 2005